

FISH AND WILDLIFE SERVICE

1011 E. Tudor Road Anchorage, Alaska 99503-6199



AFES/MMM

FEB 4 2009

Mr. Rick Trupp
Permits Coordinator
Veritas DGC Land
2000 E. 88th Avenue
Anchorage, Alaska 99507

Dear Mr. Trupp:

This responds to the letters Kuukpik/Veritas (Veritas) submitted to the U.S. Fish and Wildlife Service (USFWS) dated November 21, 2008 and December 1, 2008, requesting Letters of Authorization (LOA) for the incidental and intentional takes of polar bears for up to two seismic programs for oil and gas exploration.

Enclosed are LOAs (09-13 and 09-14), that authorizes Veritas to take small numbers of polar bears incidental to oil and gas industry exploration activities at the locations identified in your LOA requests that are within the geographical region of the Beaufort Sea Incidental Take Regulations (ITRs).

Activities will occur within two defined areas. These include, "SOI 3D" in Harrison Bay and the "Point Thomson 3D" survey west of the Canning River. If additional seismic prospects outside of the area previously identified are developed during the 2007-2008 winter season you are requested to notify the Marine Mammals Management office (MMM) of their locations prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, to amend your LOA.

Historic polar bear denning activity reveals that polar bear denning habitat occurs along creek cutbanks and river bluffs. For example, approximately 1782 miles (2870 km) of potential polar bear denning habitat is located between the Colville River and the Canning River alone. Disturbance during denning could lead to abandonment of dens and possible mortality to cubs. Seismic vibroseis activities occurring in these areas near preferred denning habitat may encounter denning polar bears. The USFWS seeks to limit disturbance to maternal polar bear den sites, both known dens and those areas that could possibly be preferred by denning polar bears. With this in mind, use caution when operating near these areas, such as the Jones Island group – a known polar bear denning area, during the maternal denning period (mid November to mid April). Veritas will also provide copies of the polar bear observation form to all Veritas



Mr. Rick Trupp

contractors operating under the LOA. Report any polar bear sightings, signs to this office by phone, FAX, or email using the polar bear observation form. Report any possible den locations that are found during work activities immediately to our office.

The U.S. Geological Survey has posted information regarding polar bear denning habitat the polar bear den habitat GIS coverage for downloading from the Alaska Science Center (ASC) website, plus associated documents. The den habitat map (ARC/INFO export file), the mapping manuscript (PDF file) and a picture of den habitat (JPG file) are now available on the ASC website (http://www.absc.usgs.gov/dataproducts.htm). Use these resources when planning activities in potential denning areas and contact us immediately if any dens are found during your activities. The USFWS biologists are also available for consultation if questions or concerns arise during the project period at the phone numbers listed below and noted in your interaction plan.

In addition, this letter includes a harassment authorization (enclosed), for Veritas and its representatives to take polar bears by harassment (deterrent activities) for the protection of both human life and polar bears while conducting activities in polar bear habitat for all 2008-2009 Winter Seismic Survey areas. This authorization is issued specifically to Veritas employees who are responsible for ensuring that trained and qualified personnel are assigned the task to harass (deter) polar bears. It is the responsibility of Veritas personnel to report all polar bear harassment events to our MMM office within 24 hours. This authorization is effective for the period, date of issuance to June 30, 2009. Intentional take is authorized under sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act (MMPA).

If a polar bear interaction escalates into a life threatening situation, Section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear if such taking is imminently necessary in self-defense or to save the life of a person in immediate danger, and such taking is reported to the USFWS, MMM office within 24 hours.

Furthermore, in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA), issuance of this LOA also fulfills the requirements for Tier 2 Consultation of the Programmatic Biological Opinion for the activities described herein. In the "Programmatic Biological Opinion for Polar Bears (*Ursus maritimus*) on Beaufort Sea Incidental Take Regulations" (June 2008; Tier 1 BO), the USFWS determined that the total take anticipated as a result of the issuance of the Regulations is not likely to result in jeopardy to the polar bear, in accordance with section 7 of the ESA. In order for the Tier 2 BO to be consistent with the "no jeopardy" conclusion of the Tier 1 BO and for an ESA incidental take statement (ITS) to be provided: (1) the proposed activity must provide the required information, as described in §18.124 of the Regulations, (2) the LOA must include any mitigation measures that the MMM believes appropriate for the specific activity and location, as described in §18.128 of the Regulations, and (3) the MMM must determine that the incidental take for the specific activity will be consistent with the negligible impact finding for the total take allowed under the Regulations.

Reasonable and prudent mitigation measures, as well as implementing terms and conditions were included for MMM in the Tier 1 BO and have been incorporated into the LOA process. Issuance of this ITS with the LOA completes ESA requirements for authorization of incidental take of the polar bear. Compliance with the terms and conditions of this LOA insures that the LOA holder is also in compliance with the ESA.

An additional requirement of this LOA is for your company to provide observational data of polar bears throughout the project and a complete report of all observations at the conclusion of the project to document take. This final report will be provided to the MMM. This report meets the tracking and reporting requirements relative to the documentation of take as required by the MMPA and the ESA.

These incidental take authorizations are issued in accordance with USFWS regulations listed at 71 FR 43926, dated August 2, 2006. Please review these regulations. Should you have any further questions contact Mr. Craig Perham of our Marine Mammals Management Office, at (907) 786-3800 or 786-3810.

Rosa Meehan, Ph.D.

Chief, Marine Mammals Management

Enclosures

cc:

Mr. Richard Shideler, ADF&G

Fairbanks Fish and Wildlife Field Office (FFWFO)

USFWS Office of Law Enforcement (OLE) North Slope Borough Department of Law



FISH AND WILDLIFE SERVICE

1011 E. Tudor Road Anchorage, Alaska 99503-6199



AFES/MMM

ISSUED: January 20, 2009 EXPIRES: June 30, 2009

LETTER OF AUTHORIZATION (09-13)

Kuukpik/Veritas (Veritas) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2009 Winter Seismic Survey Program, entitled "SOI 3D." Activities for this project are discussed in detail in the, "Plan of Operations; 2009 Winter Seismic Survey, SOI 3D North Slope, Alaska, State Land and Waters," November 2008, received with your application packet.

The LOA is valid from the date of issuance to June 30, 2009. This authorization and the required conditions below include contractors of Veritas performing Veritas-approved work under the scope of operations to be conducted. Authorization is subject to the following conditions:

- 1. The documents, "Appendix B Field Operating Procedure, Polar Bear Protocol" and "Appendix C Polar Bear Awareness and Interaction Plan" included in Veritas' application packet are approved and all provisions are incorporated by reference as conditions of this authorization and must be complied with unless specifically noted otherwise in this Letter of Authorization. A copy of this polar bear interaction plan must be available on site for all personnel.
- 2. Veritas Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.
- 3. Intentional take is prohibited under this authorization.
- 4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated November 21, 2008, that are located within the geographical region of the Beaufort Sea Incidental Take Regulations. Veritas will be responsible for any takes that occur outside the geographic region of the Beaufort Sea Incidental Take Regulations.



- 5. Polar bear monitoring, reporting, and survey activities must be conducted in accordance with 50 CFR section 18.128. In addition, Veritas must comply with the following monitoring, mitigation, and reporting requirements:
 - Veritas must cooperate with the USFWS, and other designated Federal,
 State, or local agencies to monitor the impacts of oil and gas exploration activities on polar bears;
 - Veritas must not conduct activities that operate nor pass within 1 mile of known polar bear dens (including those encountered in the field), and all observed dens must be reported to the USFWS, Marine Mammals Management Office immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and USFWS must be contacted for guidance. The USFWS will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or modification of work to conducting additional monitoring, and Veritas must comply with any additional measures specified;
 - Veritas must designate a qualified individual or individuals to observe, record, and report the effects of the activity on polar bears to the USFWS within 24 hours of visual observation. Evidence of polar bears, such as tracks, carcass, or dens, will also be reported;
 - Every polar bear observed will be recorded on a Polar Bear Observation Form. Information within the observation report will include, but is not limited to:
 - 1. Date
 - 2. Time
 - 3. Observer name
 - 4. Contact number/email
 - 5. Location, with latitude, longitude, and datum, if applicable
 - 6. Weather conditions at time of observation
 - 7. Temperature
 - 8. Visibility
 - 9. Number of bears: sex and age
 - 10. Estimated closest point of bears from personnel and facilities
 - 11. Possible attractants present
 - 12. Bear behavior
 - 13. A description of the encounter
 - 14. Duration of the encounter
 - 15. Type of Deterrents used and distance from bear when used

16. Agency/Contacts

- Veritas must allow the Fish and Wildlife Service to allow an observer on the site to monitor the impacts of the activity on polar bears, at the discretion of the Fish and Wildlife Service;
- Veritas must submit an annual monitoring report to the Marine Mammals Management Office as required under 18 CFR 18.128(f), which will be received up to 90 days after the expiration date of the LOA.
- 6. Per the "Programmatic Biological Opinion for the Beaufort Sea Incidental Take Regulations for Polar Bear (June 2008)", your request also initiates the second of the two-tiered programmatic process. In order for incidental take of the polar bear to be exempted from the prohibitions of the ESA, the LOA also serves as an "Incidental Take Statement" (ITS), required under section 7 of the Endangered Species Act of 1973 (ESA). Issuance of the LOA/ITS fulfills the requirements for Tier 2 Consultation of the Programmatic Biological Opinion for the activities described in this letter.
- 7. This authorization expires June 30, 2009.

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Chief, Marine Mammals Management	Date	

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ISSUED: January 20, 2009 EXPIRES: June 30, 2009

LETTER OF AUTHORIZATION (09-14)

Kuukpik/Veritas (Veritas) is hereby authorized to take small numbers of polar bears incidental to activities occurring during the 2009 Winter Seismic Survey Program, entitled "Point Thomson 3D." Activities for this project are discussed in detail in the, "Plan of Operations; 2009 Winter Seismic Survey, North Slope, Alaska, State Land and Waters," sent in with your application packet.

The LOA is valid from the date of issuance to June 30, 2009. This authorization and the required conditions below include contractors of Veritas performing Veritas-approved work under the scope of operations to be conducted. Authorization is subject to the following conditions:

- 1. The documents, "Appendix B Field Operating Procedure, Polar Bear Protocol" and "Appendix C Polar Bear Awareness and Interaction Plan" included in Veritas' application packet are approved and all provisions are incorporated by reference as conditions of this authorization and must be complied with unless specifically noted otherwise in this Letter of Authorization. A copy of this polar bear interaction plan must be available on site for all personnel.
- Veritas Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.
- 3. Intentional take is prohibited under this authorization.
- 4. This authorization is valid only for those activities identified in the request for a Letter of Authorization dated December 1, 2008, that are located within the geographical region of the Beaufort Sea Incidental Take Regulations. Veritas will be responsible for any takes that occur outside the geographic region of the Beaufort Sea Incidental Take Regulations.
- 5. Polar bear monitoring, reporting, and survey activities must be conducted in accordance with 50 CFR section 18.128. In addition, Veritas must comply with the following monitoring, mitigation, and reporting requirements:



- Veritas must cooperate with the USFWS, and other designated Federal, State, or local agencies to monitor the impacts of oil and gas exploration activities on polar bears;
- Veritas must not conduct activities that operate nor pass within 1 mile of known polar bear dens (including those encountered in the field), and all observed dens must be reported to the USFWS, Marine Mammals Management Office immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and USFWS must be contacted for guidance. The USFWS will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or modification of work to conducting additional monitoring, and Veritas must comply with any additional measures specified;
- Veritas must designate a qualified individual or individuals to observe, record, and report the effects of the activity on polar bears to the USFWS within 24 hours of visual observation. Evidence of polar bears, such as tracks, carcass, or dens, will also be reported;
- Every polar bear observed will be recorded on a Polar Bear Observation Form. Information within the observation report will include, but is not limited to:
 - 17. Date
 - 18. Time
 - 19. Observer name
 - 20. Contact number/email
 - 21. Location, with latitude, longitude, and datum, if applicable
 - 22. Weather conditions at time of observation
 - 23. Temperature
 - 24. Visibility
 - 25. Number of bears: sex and age
 - 26. Estimated closest point of bears from personnel and facilities
 - 27. Possible attractants present
 - 28. Bear behavior
 - 29. A description of the encounter
 - 30. Duration of the encounter
 - 31. Type of Deterrents used and distance from bear when used
 - 32. Agency/Contacts

- Veritas must allow the Fish and Wildlife Service to allow an observer on the site to monitor the impacts of the activity on polar bears, at the discretion of the Fish and Wildlife Service;
- Veritas must submit an annual monitoring report to the Marine Mammals Management Office as required under 18 CFR 18.128(f), which will be received up to 90 days after the expiration date of the LOA.
- 6. Per the "Programmatic Biological Opinion for the Beaufort Sea Incidental Take Regulations for Polar Bear (June 2008)", your request also initiates the second of the two-tiered programmatic process. In order for incidental take of the polar bear to be exempted from the prohibitions of the ESA, the LOA also serves as an "Incidental Take Statement" (ITS), required under section 7 of the Endangered Species Act of 1973 (ESA). Issuance of the LOA/ITS fulfills the requirements for Tier 2 Consultation of the Programmatic Biological Opinion for the activities described in this letter.
- 7. This authorization expires June 30, 2009.

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Chief, Marine Mammals Management		Date		_

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1011 E. Tudor Road Anchorage, Alaska 99503-6199



AFES/MMM

U.S. Fish and Wildlife Service

AUTHORIZATION TO TAKE, BY HARASSMENT, POLAR BEARS (INT09-06)

ISSUED: January 20, 2009 EXPIRES: June 30, 2009

Under Sections 101 (a)(4)(A), 109(h), and 112(c) of the Marine Mammal Protection Act of 1972, as amended, Kuukpik/Veritas (Veritas) is authorized to take, by harassment, polar bears during exploration activities in association with the 2009 Winter Seismic Survey Program. Activities will occur in two defined areas within the North Slope, "SOI 3D" and "Point Thomson 3D." These activities are discussed in detail in the, "Plan of Operations; 2008 Winter Seismic Survey," received with your application packets.

The purpose of authorizing taking by harassment, or deterrence, is to maintain human and bear safety and welfare in the North Slope oilfields. Authorizing Level B harassment take reduces the likelihood of death or injury of polar bears. This is accomplished by the following objectives:

- 1. Prevent bears from associating food with humans and facilities
- 2. "Train" bears to avoid people
- 3. Allow bears to use travel routes (natural and man-made) to move along the coast
- 4. Prevent bears from extended use of areas around facilities
- 5. Prevent bears from entering the developed parts of the oilfield

Harassment authorization is subject to the following conditions:



- 1. The polar bear interaction plan ("Appendix B Field Operating Procedure, Polar Bear Protocol" and "Appendix C Polar Bear Awareness and Interaction Plan") is approved and all provisions, unless noted specifically, are incorporated into this Letter of Authorization by reference. A copy of the polar bear interaction plan must be available on site for all personnel.
- 2. Veritas Operations Managers, or their designates, must be fully aware, understand, and capable of implementing the conditions of this authorization.
- 3. This authorization is restricted to harassment activities.
- 4. Authorized individuals are responsible for documenting and reporting to the USFWS, Marine Mammals Management Office, (907) 786-3800, all instances involving harassment activities as soon as possible and not later than 24 hours after the occurrence.
- 5. Activities will not operate nor pass within 1 mile of known polar bear dens, and all observed dens will be reported to the USFWS, Marine Mammals Management Office immediately. Should occupied dens be identified within one mile of activities, work in the immediate area will cease and USFWS will be contacted for guidance. The USFWS will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential responses may range from cessation or modification of work to conducting additional monitoring.
- 6. A final report of all encounters and hazing events must be submitted to the USFWS, Marine Mammals Management Office within 60 days from the expiration date of this authorization.
- 7. Hazing techniques must not cause the injury or death of a bear. Types of hazing techniques may include, but are not limited to:
 - Bear Monitors
 - Air horns
 - Electric fences
 - Chemical repellents
 - Acoustic recordings
 - Vehicles
 - Projectiles: cracker shells, bean bags, rubber bullets, screamers, etc.
- 8. Prior to conducting a harassment activity, operators must:
 - Reduce/eliminate attractants:
 - Secure site; notify supervisor; move personnel to safety;
 - Ensure bear has escape route(s); and
 - Ensure communication with all personnel.

- 9. When conducting a harassment activity, operators must:
 - Chose the method that will have the least effect on the bear and increase the intensity of the method or use additional methods only if necessary;
 - Shout at the bear before using projectile (avoidance conditioning); and
 - Move bear in proper direction; continue with minimally necessary deterrents to receive desired result.
- 10. After a harassment event has occurred, operators must:
 - Monitor bear movement (to ensure no return);
 - Notify supervisor and personnel to resume work; and
 - Fill out report to be sent to the USFWS as required under condition 4 (within 24 hours).
- 11. This Authorization is valid for the period indicated on this authorization, unless extended or terminated in writing by the USFWS, Marine Mammals Management Office.

Signed:	584	Mech
Date	FEB	4 2009
Date:		